Outdoor wandering parks for persons with dementia


Key Concepts/Context

Outdoor spaces in nursing homes are documented to be beneficial to residents. The author alludes to literature to highlight the specific advantages exposure to different types of outdoor spaces brings to the daily lives of people suffering from dementia. The same literature also indicates that the design of an outdoor space in special care units at long-term care (LTC) institutions should be a balance between stimulating and peaceful, quiet surroundings; between impediment-free walking and an enclosed outdoors (to prevent wandering and getting lost). In this study, the aim has been to describe the existing outdoor spaces in LTC institutions. The author concludes that the design of outdoor spaces for persons afflicted with dementia should be specific to their needs, and these designs may not necessarily conform to typical outdoor spaces like courtyards and gardens.

Methods

The methodology for this research involved a national survey of 320 LTC facilities with outdoor spaces. Questionnaires were sent to 672 facilities, of which approximately 47% returned responses. The survey questionnaire contained a mix of closed- and open-ended questions and questions whose responses would yield objective numerical data. Analysis of the data was mainly descriptive. T-tests were also conducted to compare the impact of different attributes.

Findings

The study yielded the following findings:

Facility characteristics:

- They were a mix of for-profit (61%), non-profit (17%), and religious/government (7%) facilities.
- Locations were suburban (42%), rural (35%), and urban (23%).
**SYNOPSIS**

- About 74% of the facilities had self-funded their outdoor spaces.
- The age of the outdoor spaces varied from a few months to 44 years.
- In terms of flexible hours for accessing outdoor spaces, 60% reported that their spaces were open 24/7.

**Design features:**

- Included were courtyards (76%), patios (52%), gardens (16%), and parks (11%) with a mean area of 1111.6 square yards.
- About 68% of the facilities had outdoor spaces that were separate for cognitively impaired and cognitively intact residents.
- All outdoor spaces were enclosed – by wooden fences (46%), buildings (37%), chain link fences (31%), shrubbery (12%), and few brick walls and plexiglass fences. Fences, plants, and camouflaged fences were various means used to restrict residents from leaving the premises.
- About half of outdoor spaces received sunshine throughout the day and 44% for half the day.
- The view from the outdoor space was usually a fence (41% of facilities). In other facilities the view included residential neighborhoods, other buildings, woods, streets, highways, interior courtyards, lawns, playgrounds, schools, parking lots, or farms.
- About 78% had walkways, 83% reported trees, 79% flowers, and 59% bird feeders.
- Seating included lawn furniture in 85%, picnic tables in 69%, and benches in 24% of the facilities.
- About 15% of the facilities had water features in their outdoor areas.
- Convenience features for the elderly were found in only few of the facilities – handrails, easy access to bathrooms, drinking fountains, coffee bar/ snack cart.
- About 41% had lights for the evenings.
- For protection against sunlight, umbrella tables were present in about 49% of the facilities, gazebos in about 28%, 15% had provided awnings, and 7% had trellises.
- Respondents considered the following to be essential features in outdoor spaces: lawn furniture, gazebo, trees, picnic tables, and flowers.
- Respondents considered the following to be desired features in outdoor spaces: raised garden for wheelchair access, lawn furniture, bird feeders, trees, and easy access to a drinking fountain.
- Respondents considered the following to be problematic features in outdoor spaces: concrete walkways, lawn furniture, fences, raised gardens, and flowers.
- In spite of safety features like alarm systems (26%), physical supports (17%), and television monitors (2%), being escorted by staff and visual contact were considered to be the key safety measures.

**DESIGN IMPLICATIONS**

The author recommends that the design of outdoor spaces should be adapted to the special needs of this population, as there is less scope for the users to adapt to their environment. For instance, porches and protected balconies would also reap the same benefits as a courtyard or garden.
Utilization of outdoor areas:

- Residents used the outdoor spaces for eating and barbecues (86%), exercise (62%), private parties (55%), gardening - communal (46%)/ individual (44%), sports (42%), concerts (33%), reality orientation (29%), crafts (21%), and physical/ occupational therapy (18%). Reading, storytelling, and spending time with pets were other activities.
- About 85% of outdoor spaces had been designed specifically for cognitively impaired residents, 77% for wanderers, 37% for non-ambulatory, 22% for hearing impaired, and 20% for visually impaired residents. Only 12% had been designed for all resident types.
- Over 80% of the outdoor spaces were being used by residents with dementia and wanderers. Over 50% of the spaces were also used by cognitively intact and non-ambulatory residents.
- About 62% of these spaces were used by families and visitors.
- Close to 45% of the spaces were also used by staff and volunteers.
- Usage of these spaces was higher in summer than in winter. In summer, 77% were used daily and 98%, several times a week; in winter, 46% reported rare usage and 23% were used daily. During spring and fall, about half were used daily and over 90%, several times a week.
- Issues pertaining to weather, accessibility (inaccessible area, heavy doors, distance from facility), design (no walkways, no or small benches), and supervision limited a more frequent use of the spaces.
- Facilities (69%) considered these outdoor spaces to be extremely useful and 72-84% reported these as having a positive impact on their residents.

Perceived impact

- Activities like individual gardening and private parties and design features like fountains, storage features, raised gardens, rocky gardens, and pets were significantly related to perceived impact on cognitively intact residents (P value ranging from 0.000-0.002).
- Activities like sports, exercise, crafts, individual and communal gardening, and design features like gazebo, lights, trellis, playground equipment, lawn furniture, and easy access to bathrooms were significantly related to perceived impact on cognitively impaired residents (P value ranging from 0.000-0.009).
- Activities like sports, physical therapy, exercise, crafts, communal gardening, and reality orientation, and design features like gazebo, trellis, storage features, playground equipment, lawn furniture, and easy access to fountain were significantly related to perceived impact on wanderers (P value ranging from 0.000-0.009).
Limitations

The author identified the following limitations in this study:

- The study sites included nursing homes with only special care units.
- Fewer than half of the facilities approached responded to the survey.
- Conducting t-tests helped analyze relations between impact of the outdoor areas and its characteristics.
- Survey does not reveal the recent trends in outdoor spaces for people with dementia.